



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,029	12/02/2003	Marcel Meier	004501-755	4702

21839 7590 11/03/2006

BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

HANAN, DEVIN J

ART UNIT	PAPER NUMBER
----------	--------------

3745

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/725,029	Applicant(s) MEIER ET AL.	
	Examiner Devin Hanan	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9,11-13,15,16,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 6,10,14,17 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/2/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/2003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "slots in the heat protection wall" of claims 6, 10, 14 and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-9, 11-13, 15-16 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Swihart et al. (U.S. Patent 4,679,984).

Swihart et al. disclose a heat protection wall (fig 4, 24 is capable of protecting the bearings from the heat associated with area of the turbine wheel side) for an exhaust gas turbine, the exhaust gas turbine having a turbine casing (18), a shaft (16) rotatably mounted in a bearing housing (26), and a turbine wheel (12) arranged on a shaft, and the heat protection wall defining with the turbine casing an inflow passage (passage between 24 and 32) leading to the turbine wheel, wherein the heat protection wall has means for centering (24 is stepped to fit between 18 and 26) the turbine casing relative to the shaft mounted in the bearing housing.

Regarding claim 2, Swihart et al. disclose the heat protection wall has at least two seatings (the heat protection wall 24 has numerous steps which are equivalent to the seats described by the applicants) as means for centering the turbine casing relative to the shaft, a first seating of the at least two seating being provided for resting on the bearing housing, and a second seating of the at least two seatings being provided for resting on the turbine casing.

Regarding claim 3, Swihart et al. disclose at least one of the first or second seatings is designed as an encircling edge (the step of the heat protection wall next to casing 18 and the bolt in casing 18 qualifies as an encircling edge) which is provided for resting on the turbine casing.

Regarding claim 4, Swihart et al. disclose the first and second seatings are designed to be directed radially in the same direction (24 has two steps relative to casing 18).

Regarding claim 5, Swihart et al. disclose the heat protection wall has centering lugs either in the region of the first seating or in the region of the second seating which centering lugs are provided for engaging slots which are set into either the bearing housing or the turbine casing (the radially outermost part of 24 is set into the casing 18).

Regarding claim 7, Swihart et al. disclose a bearing housing for an exhaust-gas turbine, the exhaust-gas turbine having a turbine casing (18), a shaft (16) rotatably mounted in the bearing housing (26), a turbine wheel (12) arranged on the shaft, and a heat-protection wall (24) which, in the exhaust gas turbine, defines with the turbine casing an inflow passage leading to the turbine wheel, the heat-protection wall having means, for centering the turbine casing (steps on 18, 24 and 26) relative to the shaft mounted in the bearing housing, wherein the bearing housing has means for centering (the bearing housing has steps to interact with the backplate 24, similar to the turbine housing) the turbine casing via the heat-protection wall and relative to the shaft mounted in the bearing housing.

Regarding claim 8, Swihart et al. disclose the bearing housing, as means for centering the turbine casing via the heat protection wall and relative to the shaft mounted in the bearing housing (the bearing housing has a stepped portion next to the mounting bolt), comprises at least one seating for resting on the heat protection wall.

Regarding claim 9, Swihart et al. disclose the seating of the bearing housing is designed as an encircling edge (the radially outermost portion of 26 encircles part of 24).

Regarding claim 11, Swihart et al. disclose slots are set into the bearing housing (the steps of 24 go into casing 18) as means for centering the turbine housing via the heat protection wall and relative to the shaft mounted in the bearing housing, which slots are provided for receiving centering lugs attached to the heat protection wall.

Regarding claim 12, Swihart et al. disclose all of the claimed limitations as discussed in the rejection of claim 1 above.

Regarding claim 13, Swihart et al. disclose all of the claimed limitations as discussed in the rejection of claim 2 above

Regarding claim 15, Swihart et al. disclose all of the claimed limitations as discussed in the rejection of claim 5 above

Regarding claim 16, Swihart et al. disclose a shaft (fig 2, 16) rotatably mounted in a bearing housing (26), a turbine wheel (12) arranged on the shaft and a heat protection wall defining with the turbine casing an inflow passage (24 defines part of the inflow passage) leading to the turbine wheel (12).

Regarding claim 18, Swihart et al. disclose an exhaust turbine having a turbine casing (18), a shaft (16) rotatably mounted in a bearing housing (26), a turbine wheel (12) arranged on the shaft, and a heat protection wall (24), with the heat protection wall defining with the turbine casing an inflow passage leading to the turbine wheel, wherein an encircling edge for resting on the encircling edge of the heat protection wall is provided on the bearing housing (26).

Regarding claim 19, Swihart et al. disclose an exhaust gas turbine with slots which are provided for receiving the centering lugs attached to the heat protection wall are set into either the bearing housing or the turbine casing (both 18 and 26 have slots to accommodate the back plate 24).

Allowable Subject Matter

Claim 6, 10, 14, 17 and 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The patents to McEachern et al. (U.S. Patent 5,403,150), Johnston et al. (U.S. Patent 4,704,075) and Smale (U.S. Patent 4,02,149) are cited for their discussion of heat protection walls (66, 92 and 44 respectively)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Hanan whose telephone number is 571-272-6089. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on 571-272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Devin Hanan
Patent Examiner
Art Unit 3745



EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

10/30/06